A Dissertation
on
Cynanche Trachealis
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When we contemplate the variety of character in which the supreme director of our destinies has in the plenitude of his unerring wisdom deemed it expedient to inflict upon our fallen condition an interminable series of diseases: It must excite in us the deepest sense of astonishment, and gratitude, that the privilege should be conceded to us of prolonging the span of our mortal sojourn, while thus surrounded by a host of foes so inimical to the frail tenour by which we are permitted to retain our earthly existence; Still more too, is it calculated to excite our admiration, that in the culture of a noble art the means are extended to us, not only of encountering the progress of disease, but of arresting its destructive ravages, and of rescuing from its jaws those

unhappy wretches who have been consigned to its depredations.

No stage of existence affording to us an immunity from the invasions of Disease – but every period of life being obnoxious to it in some one of its innumerable forms, we are subjected to the afflicting necessity of seeing it exercise its tyrannick sway alike on suffering innocence, which has as yet scarcely become an inhabitant of the breathing world, and on the exhausted traveller in the tide of time, who in the common concurrence of human events is now on the eve of exchanging this sublunary condition for one of perpetual rest.

Such being the nature of our constitution, that our nobler sympathies are most cogently appealed to, by the sufferings of the helpless, and especially by infantile distress – we are naturally induced to investigate those maladies to which this interesting age is more particularly incident, and as one of the most formidable of the number, we enter on the consideration

of Cynanche Trachealis;

Which though perhaps not so remarkable for spreading desolation over vast expanses of territory, nor at all times productive of those direful consequences, which spring from the havock of some other diseases of more mysterious character, and fallacious appearance yet is of frequent occurrence, and has made occasional inroads upon domestick happiness and tranquillity, of the most lamentable, and grievous nature - and is therefore to be esteemed among those scourges of mortality which require the immediate interposition of Medical aid.

Cynanche Trachealis confines its attacks almost exclusively to the period of childhood, or to such subjects as are between the ages of one and twelve years, but is particularly prone to attack those of a still more tender age, and such as have been but recently deprived of the fostering nutriment of the mothers breast.

Though it does occasionally extend to much more advanced ages, and has even occurred in the

decline of life.

Of the causes which cooperate in its production, the application of cold is reckoned to be the principal, as it can almost invariably be traced to its agency on the system, and hence it is of most frequent occurrence in variable climates, where the alternations of heat and cold, with moisture are most common — and to this fact may be ascribed the circumstance of its appearing most generally in our country in Spring, and Autumn, these being the seasons in which alternations of temperature are most frequent =

Its attacks are induced by too free exposure to vicissitudes of weather, in the form of a common catarrh: Though it sometimes comes on independantly of the interference of this agent, and without any assignable cause; — At such times presenting itself in the character of an Epidemic, it pervades whole districts of country, and it is under these contingencies that its ravages are most apt to be

extended beyond their wonted limits.

Notwithstanding its having occasionally assumed the Epidemic form, we have upon record no satisfactorily authenticated cases of its having ever appeared in the yet more formidable one of contagion: though it has it is true run throughout entire families in consequence of a certain predisposition or liability to it existing among them.

The duration of the fever depending upon the peculiar circumstances by which it may be accompanied must be very indefinite. Instances have occurred in which the extraordinary violence of the attack has produced a fatal termination in a few hours and again we have cases in which it has been protracted to the fifteenth or twentieth day. but in the generality of instances it does not continue longer than two or three days, when by a judicious administration of energetic remedies we are enabled to cut short its career and obtain a triumphant

result.

As we have already stated this disease in its forming stage is similar to a common hazard. A few days previous to its appearance the Diagnostic marks announcing us of its approach, are a gradual transmutation in the disposition of the child from playfulness and vivacity to a state of languor, and listlessness succeeded by evident drooping, and a careless indifference to external impressions subsequent to which we have a succession of febrile symptoms — such as violent shivering with a small quick and full pulse a small hacking cough, the tongue wearing a slightly whitish aspect the lips and cheeks occasionally flushed with sometimes the attendance of coryza.

The breathing is attended with much difficulty, and is performed with an unusual sighing sound which is supposed to resemble the passing of air through a brazen tube. This condition is also accompanied with alternate changes of chilliness

and heat – Usually towards midnight the patient becomes worse, having an exacerbation of all the preceding symptoms, in consequence probably of exposure to cold by throwing off the bed-clothes – and he is suddenly awoke by painful respiration with a whistling noise, accompanied by a cough which resembles the barking of a hoarse Dog, whilst the respiration resembles the sound made by a current of air in a confined channel.

There may be likewise an affection of the Rima Glottidis, and muscles of the part – in which case we have the breathing shrill, and like the crowing of a young Cock – Neither does the voice at this time escape unchanged, but becomes hoarse and stridulous –

The preceding symptoms are followed by a long and deep expiration with shoulders elevated and head thrown back – and are also attended by severe head-ache.

This condition generally undergoes a sudden remission,

and abates from its violence sufficiently long to lull the innocent sufferer into a gentle slumber, but this is a momentary and deceitful calm from which he is destined to be immediately aroused by a more violent return of the paroxysm, and danger of instant suffocation. The limbs of the patient at this period are bedewed with a cold and clammy sweat, we distinguish in the Trachea a rattling sound the countenance looses its wonted blush, and ~~assumes~~ in its stead a livid hue. The Eye in place of its usual form, has that of protrusion with a stare of vacancy — To this miserable condition which denotes the utmost peril to the unfortunate sufferer, vomiting sometimes affords a momentary relief — and upon other more happy occasions, the Symptoms remit without its occurrence.

But the uneasiness manifested by the patient still proclaims too plainly the presence of intense pain restlessness and anxiety — and death finally terminates his miserable existence, whilst in the act of making an unavailing effort at expiration.

Such is the calamitous event of a malady to which we are but too frequently compelled to bow with submission, acknowledging the inefficacy of our skill to avert the impending stroke.

This disease has been defined to be "an inflammation of the Glottis, Larynx, and upper part of the Trachea, whether the membranes be affected, or the adjacent parts."

Almost all authors who have written on croup, have concurred in dividing it into the two heads inflammatory and spasmodic and apparently with the utmost propriety. Though we consider the division to be quite unnecessary in as much as the indications to be observed in the method of cure are precisely the same in the one case as in the other, and shall therefore proceed to treat it as though none such were recognized.

This affection originating as above mentioned, its primary symptoms are those of a slightly inflammatory character; but as gradually increased violence with the progress of the disease we have established in process of time an inflammatory action of the most vehement nature not

merely located in the lining membrane of the Trachea, but extending itself to all the adjacent structure. sometimes affecting spasmodically the muscles of the Glottis, and involving at the same time all those in the vicinity of the Trachea.

The opinion which has prevailed extensively, that a preternatural membrane is formed by the exudation of coagulating Lymph during the inflammation which lines the Trachea thereby affording an impediment to respiration and finally by its presence producing suffocation does not seem to be confirmed by the post mortem investigations which have been made in our country.

That it has been occasionally discovered by these examinations is true but its existence has not proved of sufficient frequency, to be received as a satisfactory explanation of the Fatality attendant on the disease.

It has been disclosed to us by post mortem examinations, that the inflammation extends throughout the lining membrane of the Trachea and Bronchia, even to the substance of the Lungs and causes an effusion from

their surfaces of lymph or mucus, which penetrate the ramifications of the Bronchia and cellular structure of the lungs, producing that obstruction to the passage of air and oppression of the Pulmonary Organs and those subsequently painful efforts at respiration, during which the patient not unfrequently expires.

Such being now esteemed the genuine character of Cynanche Trachealis and it being admitted on all sides to be an inflammatory affection of the most violent nature insidious in its attack, and speedy in its progress running its course and terminating fatally in the brief space of a few hours. It is obvious that we should meet it with the most prompt and efficient measures, those being best calculated to subdue it in its onset.

The treatment requisite to fulfil this indication, must consist it is evident, in those remedies which are most decidedly Antiphlogistic, and even these do not admit of too great length in their employment, but should be urged to such an extent as to make

a bold and decided impression, thus to reduce as speedily as possible the existing inflammatory action and prove a prophylactic against the deleterious consequences which it is about to induce.
That this treatment comprises those remedies which are most actively depleting it is unnecessary to state, and at the head of this class we are of opinion that Venesection should be placed - as holding the first rank in the list of evacuants and which when speedily and energetically employed has such decided efficacy in counteracting the inflammatory action that a competent substitute for its utility is afforded us in the exhibition of no other remedies.

Emetics have at all times and by all authors been much commended in croup and indeed such confidence have they maintained with the generality of Practitioners that they have been almost exclusively relied on in its treatment; The benefit derived from their use in every stage of the disease has been

conceded by all but their efficacy is rendered doubly conspicuous when issued in a liberal and free use of the Lancet we are warranted by the highest authority in affirming — and in fact if blood letting be urged with sufficient decision during the formation of the Disease it will most probably entirely supersede the demand for Emetics.

With the view of promoting vomiting, various medicines have been used and highly extolled by different individuals as they might severally have happened to be favourite remedies with those who administered them.

Corrosive Sublimate in the form of a weak solution was formerly much used for this purpose, and was considered useful in causing an ejection of the adventitious membrane before alluded to; but this is certainly a hazardous Medicine, and should not be employed to produce an effect easily attained by articles equally beneficial and much less perilous.

The virtues of Polygala Seneka were first introduced to publick attention by Dr Archer of Maryland, it is advised by him to be exhibited in form of a weak decoction - and he particularly commends it, when we wish to excite expectoration and as of much utility in inducing a discharge of the exhaneous membrane. It should be exhibited in small doses as frequently repeated as the urgency of the symptoms may require.

The stimulating properties of the Medicine forbid its administration during the early and inflammatory stages of the disease but having preceded it with sufficient depletion, and obtained a remission of inflammatory action the properties of this article offer us the most effectual means of promoting copious excretions from the Trachea and Lungs.

The Hive Syrup of Professor Coxe into the composition of which the above Medicine enters as an important constituent, here demands over particular.

attention as a remedy which has acquired much celebrity in the cure of croup. The superior merits of this combination have been abundantly attested by extensive experience and the best evidence we are enabled to offer of its singular utility is the ample reputation it has established in the cure of the disease throughout every part of our continent. It unites the three-fold effect of an Emetic, Purgative and Diaphoretic.

Emetic medicines are principally demanded in the latter stages of croup:
When the inflammation has by its long continuance extended itself to the Bronchia and occasionally to the substance of the lungs, causing an increased secretion and effusion of mucus into their cellular structure we find them very beneficial in promoting its discharge and relieving the painful oppression caused by its presence - which would speedily terminate in the patient's entire suffocation.
To alleviate this miserable condition the most active of the class of Emetics should be resorted to and

should the stomach prove insensible to their operation the warm bath should be used to overcome its atonic condition. It may also be proper during the course of the disease frequently to administer a mild Emetic to relieve the Trachea of the mucous effusions which are constantly occurring in it. It has been in likemanner recommended as an auxiliary measure to inhale the vapour of warm water, and vinegar, or Hoffmans anodyne liquor bath with the view of lessening spasm, and assisting expectoration.

Nor must the application of Epispastics so important in all inflammatory affections be here overlooked, much advantage will be derived from their use, after we have succeeded in reducing excitement.
A Blister applied at this period, so as to cover the whole surface of the throat and the discharge continued after its removal has never failed to prove of infinite utility — Topical detraction of blood by cupping, and leeching, are strongly recommended.
Succeeding to venesection and Emetics, a large ~~blister~~ may

be placed on the breast in conjunction with cupping the back — Leeches also applied to the part in the vicinity of the throat as near as practicable to the seat of inflammation constitute important steps in our treatment.

Mercurial purges have by many been strenuously advocated and as the most zealous defender of their efficacy we would mention Dr Hamilton of Edinburgh, who almost deems them specific in the disease and even asserts that when administered prior to the appearance of tiredness of the eyes and other morbid symptoms they have never disappointed him in its cure. But extensive experience has so far proved this to be an exaggerated statement that the use of calomel is now no longer confided in to the exclusion of other remedies — but is considered most useful after we have derived the full effect from the abstraction of those means which are most directly necessary.

Having thus related in detail the usual methods

of treating this formidable affection, we would only further subjoin our opinion, that if the Lancet were freely used in the formation of the attack, it would in the generality of instances obviate the necessity for other remedies.

But the impropriety of trusting to the tardy operation of topical applications for the reduction of violent inflammation, must be apparent to every one, we would therefore urge the necessity of commencing with venesection, and carrying it to such an extent as to cut short the career of this treacherous disease, before it has become too firmly established, to be eradicated without infinite peril to the life of the patient.

The timidity discovered in the use of the Lancet has arisen no doubt from the belief generally entertained, that the tender age to which it is most commonly confined will not admit of depletion so powerful as venesection. But this is an opinion entirely fallacious, and one calculated to produce much, and irremediable

mischief — for there is not a fact in the history of Medicine more satisfactorily ascertained, than that of the ability of youth to bear vigorous depletion.

Being impressed with these views of the subject, we are fully persuaded, that by persuing this plan of treatment together with a strict adherence to the Antiphlogistic regimen, this formidable affection might be shorn of many of its terrors, and its management thus rendered much less difficult; we should be no longer compelled to lament its unusual fatality.

Should all our exertions to alleviate the sufferings of the patient, prove unavailing, we should as a final but necessary resource, have recourse to Bronchotomy; though the Success of the operation is very equivocal, in consequence of the extensive effusion into the Pulmonary structure.